

C L A I M S

1. Ophthalmic composition with prolonged residence time on the eye, in particular in the form of a gel  
5 which can be administered as drops, of an ointment or the like, containing a free-flowing vehicle with increased viscosity and a preservative, and, where appropriate, one or more active ingredients and conventional additives such as tonicity agents,  
10 substances to adjust the pH etc., characterized in that the preservative is essentially formed by a benzyl-lauryldimethylammonium salt.
2. Ophthalmic composition according to Claim 1, characterized in that the composition has as vehicle an  
15 aqueous base for a gel which can be administered as drops.
3. Ophthalmic composition according to Claim 1 or 2, characterized in that the vehicle of the composition contains at least one viscosity-increasing  
20 synthetic or natural polymer in aqueous solution or dispersion.
4. Ophthalmic composition according to Claim 3, characterized in that the polymer comprises a carboxy-vinyl polymer, in particular a carboxypolymethylene, or  
25 an ethylene/maleic anhydride copolymer.
5. Ophthalmic composition according to Claim 3, characterized in that the polymer comprises a cellulose derivative, a natural gum such as xanthan, a dextran derivative or the like.
- 30 6. Ophthalmic composition according to any of Claims 1 to 5, characterized in that the liquid portion of the composition is in the form of a single-phase aqueous liquid.
7. Ophthalmic composition according to any of  
35 Claims 1 to 5, characterized in that the liquid portion of the composition is in the form of a two-phase liquid, preferably as O/W emulsion.

8. Ophthalmic composition according to any of Claims 1 to 7, characterized in that the preservative is benzyl-lauryldimethylammonium chloride.
9. Ophthalmic composition according to any of  
5 Claims 1 to 8, characterized in that the concentration of the preservative based on the total amount of the composition is between 0.001% by weight and 0.5% by weight, preferably between 0.01% by weight and 0.05% by weight.
- 10 10. Ophthalmic composition according to any of Claims 1 to 9, characterized in that the composition contains vitamin A as active ingredient.
11. Ophthalmic composition according to any of Claims 1 to 10, characterized in that the composition  
15 comprises 0.001 to 1% by weight, preferably 0.1 to 0.5% by weight, of carboxypolyethylene, 0.0005 to 0.05% by weight, preferably 0.001 to 0.01% by weight, of benzyl-lauryldimethylammonium chloride, 0.1 to 10% by weight, preferably 1 to 5% by weight, of sorbitol, and alkali  
20 metal hydroxide or acid to adjust a physiologically acceptable pH and otherwise water.
12. Use of a benzyl-lauryldimethylammonium salt as preservative for producing ophthalmic compositions intended for repeated use over lengthy periods and/or  
25 formulated for a lengthy residence time on the eye after each use, whereby irritation and/or damage to the tissue of the eye are avoided.
13. Use of benzyl-lauryldimethylammonium chloride according to Claim 12.
- 30 14. Use of the preservative according to Claim 12 or 13 for eye drops having at least one active ingredient.
15. Use of the preservative according to Claim 12 or 13 for a simulated tear fluid.